



Sea-Level Rise: Current and Future Guidance Update

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Shoreline Planners' Coordination Meeting
October 28, 2010

Why Are We Doing This?



What has been done?

- Appendix A: Addressing Sea Level Rise (SLR) in Shoreline Master Programs
- <http://www.ecy.wa.gov/programs/sea/shorelines/smp/handbook/index.html>



Shoreline Master Programs (SMPs) | Home | Washington State Department of Ecology - Windows Internet Explorer

http://www.ecy.wa.gov/programs/sea/shorelines/smp/index.html

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Shoreline Master Programs (SMPs)

SHORELINE MASTER PROGRAMS

- Citizen Guide
- Shoreline Planners Toolbox
- Permits and Enforcement
- Media Kit
- Special Topics

Laws, Rules, and Cases


- News
- Publications
- Contacts


[Shoreline Management Home](#) > [SMP Home](#)


Shoreline Master Programs


Washington has several [laws and other legal tools](#) to help guide our shoreline use. One of the most important set of tools is the [Shoreline Management Act](#) and the local government [shoreline master programs](#). About 260 local programs must be updated by 2014.

We hope you will get involved.

 **CITIZEN GUIDE:** Learn more and help shape the future of Washington's shorelines.

 **SHORELINE PLANNERS TOOLBOX:** Find resources for updating shoreline master programs.

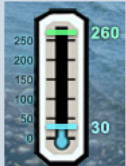
 **PERMITS AND ENFORCEMENT:** Learn about local shoreline permits and enforcement.

 **MEDIA KIT:** Find news releases and related content.

SPECIAL TOPICS:

- [Shoreline Management Act: Rulemaking 2010](#)
- [Green Shorelines for Lake Washington and Sammamish](#)
- [Improving Shoreline Management Report](#)
- [Geoduck Aquaculture](#)

SMP UPDATES APPROVED TO DATE



SPOTLIGHT

BLOG: ECOconnect

[Be the wave in your local SMP](#)

NEWS RELEASES

[Ecology starts review of Sammamish shoreline program update](#)

[Ecology starts review of Tukwila shoreline program update](#)

[Ecology seeking public comment on updates to state shoreline rules](#)

[Comment time extended for Des Moines and SeaTac shoreline program updates](#)

PUBLICATIONS

[Focus on Making Sense of Tough Issues](#)

[SMP Handbook: Critical Areas Ordinances](#)

[SMP Handbook: Addressing Sea Level](#)

Start | Internet

Inbox - Microso... | Shoreline Mas... | Microsoft Power... | sea site.bmp - P...

Projected Sea Level Rise in WA

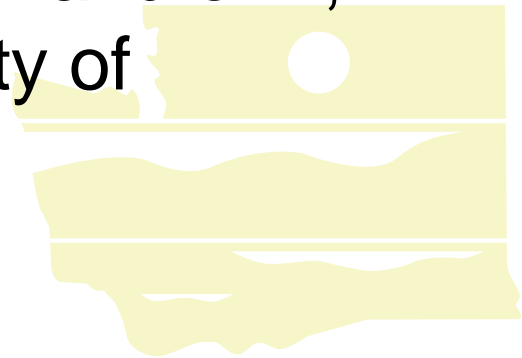
Table 1. – Sea level rise predictions for the outer coast and Puget Sound.

	Puget Sound	NW Olympic Peninsula	Central & Southern Outer Coast
2050	Very Low 3" Medium 6" Very High 22"	Very Low -5" Medium 0" Very High 14"	Very Low 1" Medium 5" Very High 18"
2100	Very Low 6" Medium 13" Very High 50"	Very Low -9" Medium 2" Very High 35"	Very Low 2" Medium 11" Very High 43"

Adapted From: *Sea Level Rise in the Coastal Waters of Washington State.*

Environmental Impacts of SLR

- Increased coastal flooding, erosion, and storm damage
- Reduced coastal habitat
- Threats to particular species
- Impacts will differ based on coastal landform, extent of development, and capacity of shoreline to adapt



Addressing SLR in SMPs

- Public Participation
- Phase 1 – Shoreline jurisdiction
- Phase 2 – Shoreline inventory & characterization
- Phase 3 – Goals, policies & regulations, environmental designation, and shoreline modification policies
- Phase 4 – Restoration plan



WASHINGTON STATE
DEPARTMENT OF
ECOLOGY

Public Participation

- Inform public of intent to address SLR
- Controversial issue
- Use local information if available



Shoreline Jurisdiction

- OHWM will shift over time
- Measure and account for shifts in future updates



Photo credit: Hugh Shipman

Shoreline Inventory & Characterization

- Map landforms and determine vulnerability
- Public Access - threats to public access sites
- Shoreline Use Analysis – threats to current and potential future built environment



Phase 3 Tasks

- Goals, Policies, & Regulations
- Environment Designations
- Shoreline Modifications Policies



Restoration Plan

- Improve resilience
- Consider shifting shorelines
- Shift priorities accordingly



Photo credit: Hugh Shipman

What is being done?

- **Project:** “Planning for Rising Sea level in Washington: Providing Tools and Guidance for Local Governments”



What will be done?

- Outreach webpage on Ecology's website
- Encourage increased communication
- Identify coastal areas that are particularly vulnerable to sea level rise
- Expand on Appendix A



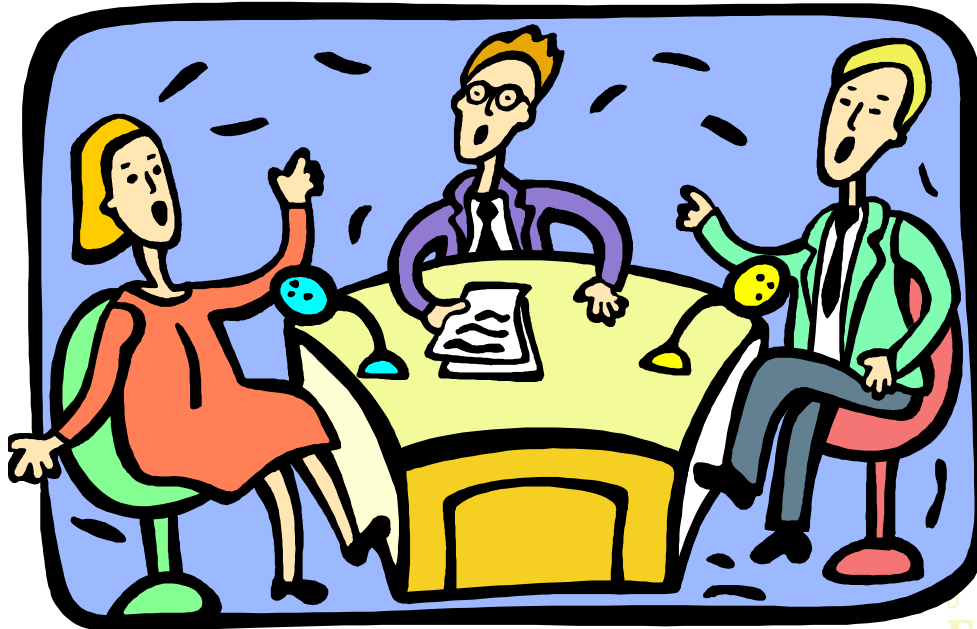
Education & Outreach

- Educational materials
- Create a webpage



Foster Communication

- Informal advisory committee
- Collaborate with experts and engage in regional climate activities



Vulnerable Areas




- Outer central and southern coasts
- South Puget Sound
- North east Puget Sound-Skagit Bay

Planning for Sea-Level Rise

- Develop a guidebook around input from local government

PREPARING FOR CLIMATE CHANGE
A Guidebook for Local, Regional,
and State Governments



Written by
Center for Science in the Earth System (The Climate Impacts Group)
Joint Institute for the Study of the Atmosphere and Ocean
University of Washington
King County, Washington
With an introduction by King County Executive Ron Sims

In association with
ICLE
Local
Governments
for Sustainability

King County

**Sea Level Rise in the Coastal
Waters of Washington State**


A report by
the University of Washington Climate Impacts Group
and the Washington Department of Ecology

Prepared by Philip Mote, Alexander Petersen, Spencer Reeder, Hugh Shipman, and
Lara Whiteley Binder

January 2008

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State of Washington



**The Washington Climate Change
Impacts Assessment**

*Evaluating Washington's Future
in a Changing Climate*

A report by
The Climate Impacts Group
University of Washington
June 2009

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Climate Science
in the Public Interest

Questions??

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